

Mustapha Abdelmoula

List of Publications by Year in descending order

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papers

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101543

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Thermodynamic Equilibria in Aqueous Suspensions of Synthetic and Natural Fe(II)-Fe(III) Green Rusts: Occurrences of the Mineral in Hydromorphic Soils. <i>Environmental Science & Technology</i> , 1998, 32, 1058-1068.	10.0	301
2	Mechanisms of formation and structure of green rust one in aqueous corrosion of iron in the presence of chloride ions. <i>Corrosion Science</i> , 1998, 40, 1547-1560.	6.6	276
3	The preparation and thermodynamic properties of Fe(II)-Fe(III) hydroxide-carbonate (green rust 1); Pourbaix diagram of iron in carbonate-containing aqueous media. <i>Corrosion Science</i> , 1995, 37, 2025-2041.	6.6	245
4	Identification of a green rust mineral in a reductomorphic soil by Mossbauer and Raman spectroscopies. <i>Geochimica Et Cosmochimica Acta</i> , 1997, 61, 1107-1111.	3.9	233
5	Surface chemistry and structural properties of mackinawite prepared by reaction of sulfide ions with metallic iron. <i>Geochimica Et Cosmochimica Acta</i> , 2002, 66, 829-836.	3.9	226
6	Adsorption and oxidation of PCP on the surface of magnetite: Kinetic experiments and spectroscopic investigations. <i>Applied Catalysis B: Environmental</i> , 2009, 89, 432-440.	20.2	226
7	Iron(II,III) Hydroxycarbonate Green Rust Formation and Stabilization from Lepidocrocite Bioreduction. <i>Environmental Science & Technology</i> , 2002, 36, 16-20.	10.0	174
8	Effect of orthophosphate on the oxidation products of Fe(II)-Fe(III) hydroxycarbonate: the transformation of green rust to ferrihydrite. <i>Geochimica Et Cosmochimica Acta</i> , 2001, 65, 1715-1726.	3.9	131
9	Iron control by equilibria between hydroxy-Green Rusts and solutions in hydromorphic soils. <i>Geochimica Et Cosmochimica Acta</i> , 1999, 63, 3417-3427.	3.9	122
10	Conversion electron Mossbauer spectroscopy and X-ray diffraction studies of the formation of carbonate-containing green rust one by corrosion of metallic iron in NaHCO ₃ and (NaHCO ₃ + NaCl) solutions. <i>Corrosion Science</i> , 1996, 38, 623-633.	6.6	118
11	Coprecipitation of Fe(II-III) hydroxycarbonate green rust stabilised by phosphate adsorption. <i>Solid State Sciences</i> , 2004, 6, 117-124.	3.2	114
12	Structure and stability of the Fe(II)-Fe(III) green rust fougérite mineral and its potential for reducing pollutants in soil solutions. <i>Applied Geochemistry</i> , 2001, 16, 559-570.	3.0	109
13	Iron reduction and changes in cation exchange capacity in intermittently waterlogged soil. <i>European Journal of Soil Science</i> , 2002, 53, 175-183.	3.9	104
14	The dry oxidation of tetragonal FeS 1-x mackinawite. <i>Physics and Chemistry of Minerals</i> , 2001, 28, 600-611.	0.8	103
15	Synthesis of Fe(II-III) hydroxysulphate green rust by coprecipitation. <i>Solid State Sciences</i> , 2002, 4, 61-66.	3.2	98
16	Coprecipitation of Fe(II) and Fe(III) cations in sulphated aqueous medium and formation of hydroxysulphate green rust. <i>Solid State Sciences</i> , 2003, 5, 1055-1062.	3.2	92
17	Fougérite, a new mineral of the pyroaurite-iowaite group: description and crystal structure. <i>Clays and Clay Minerals</i> , 2007, 55, 323-334.	1.3	92
18	Fougérite and Fe(II)-Fe(III) hydroxycarbonate green rust; ordering, deprotonation and/or cation substitution; structure of hydrotalcite-like compounds and mythic ferrosic hydroxide. <i>Solid State Sciences</i> , 2005, 7, 545-572.	3.2	91

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19	Arsenite sequestration at the surface of nano-Fe(OH) ₂ , ferrous-carbonate hydroxide, and green-rust after bioreduction of arsenic-sorbed lepidocrocite by <i>Shewanella putrefaciens</i> . <i>Geochimica Et Cosmochimica Acta</i> , 2009, 73, 1359-1381.	3.9	88
20	Green rusts synthesis by coprecipitation of Fe ^{II} –Fe ^{III} ions and mass-balance diagram. <i>Comptes Rendus - Geoscience</i> , 2006, 338, 420-432.	1.2	78
21	Oxidation modes and thermodynamics of Fe ^{II} –Fe ^{III} oxyhydroxycarbonate green rust: Dissolution–precipitation versus in situ deprotonation. <i>Geochimica Et Cosmochimica Acta</i> , 2010, 74, 953-966.	3.9	76
22	Electrochemical formation of a new Fe(II)–Fe(III) hydroxy-carbonate green rust: characterisation and morphology. <i>Electrochimica Acta</i> , 2001, 46, 1815-1822.	5.2	74
23	Formation of α -ferric green rust TM and/or ferrihydrite by fast oxidation of iron(II–III) hydroxychloride green rust. <i>Corrosion Science</i> , 2003, 45, 2435-2449.	6.6	68
24	Coprecipitation thermodynamics of iron(II–III) hydroxysulphate green rust from Fe(II) and Fe(III) salts. <i>Corrosion Science</i> , 2003, 45, 659-676.	6.6	62
25	Title is missing!. <i>Hyperfine Interactions</i> , 1998, 112, 235-238.	0.5	60
26	Formation of Hydroxysulphate Green Rust 2 as a Single Iron(II-III) Mineral in Microbial Culture. <i>Geomicrobiology Journal</i> , 2005, 22, 389-399.	2.0	58
27	Speciation of iron; characterisation and structure of green rusts and Fe ^{II} –Fe ^{III} oxyhydroxycarbonate fougérite. <i>Comptes Rendus - Geoscience</i> , 2006, 338, 402-419.	1.2	46
28	Role of secondary minerals in the acid generating potential of weathered mine tailings: Crystal-chemistry characterization and closed mine site management involvement. <i>Science of the Total Environment</i> , 2021, 784, 147105.	8.0	43
29	Berthierine-like mineral formation and stability during the interaction of kaolinite with metallic iron at 90 °C under anoxic and oxic conditions. <i>American Mineralogist</i> , 2013, 98, 163-180.	1.9	42
30	Biogenic hydroxysulfate green rust, a potential electron acceptor for SRB activity. <i>Geochimica Et Cosmochimica Acta</i> , 2007, 71, 5450-5462.	3.9	41
31	Competitive Formation of Hydroxycarbonate Green Rust 1 versus Hydroxysulphate Green Rust 2 in <i>Shewanella putrefaciens</i> Cultures. <i>Geomicrobiology Journal</i> , 2004, 21, 79-90.	2.0	40
32	Green rusts in electrochemical and microbially influenced corrosion of steel. <i>Comptes Rendus - Geoscience</i> , 2006, 338, 476-487.	1.2	40
33	Bioreduction of ferric species and biogenesis of green rusts in soils. <i>Comptes Rendus - Geoscience</i> , 2006, 338, 447-455.	1.2	39
34	Nitrite Reduction by Biogenic Hydroxycarbonate Green Rusts: Evidence for Hydroxy-nitrite Green Rust Formation as an Intermediate Reaction Product. <i>Environmental Science & Technology</i> , 2014, 48, 4505-4514.	10.0	39
35	Formation and crystallographical structure of hydroxysulphate and hydroxycarbonate green rusts synthesised by coprecipitation. <i>Journal of Physics and Chemistry of Solids</i> , 2006, 67, 1016-1019.	4.0	38
36	Vegetation effects on pedogenetic forms of Fe, Al and Si and on clay minerals in soils in southern Switzerland and northern Italy. <i>Geoderma</i> , 2007, 141, 119-129.	5.1	38

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37	Influence of Phosphate on Corrosion Products of Iron in Chloride-Polluted-Concrete-Simulating Solutions: Ferrihydrite vs Green Rust. <i>Corrosion</i> , 2002, 58, 467-478.	1.1	34
38	Using Ca Fe layered double hydroxide transformation to optimise phosphate removal from waste waters. <i>Applied Clay Science</i> , 2019, 182, 105281.	5.2	34
39	Immobilization of P by oxidation of Fe(II) ions leading to nanoparticle formation and aggregation. <i>Applied Geochemistry</i> , 2013, 35, 325-339.	3.0	31
40	Reductive transformation and mineralization of an azo dye by hydroxysulphate green rust preceding oxidation using H ₂ O ₂ at neutral pH. <i>Chemosphere</i> , 2009, 75, 212-219.	8.2	30
41	Aluminium substitution in iron(II/III)-layered double hydroxides: Formation and cationic order. <i>Journal of Solid State Chemistry</i> , 2008, 181, 2285-2291.	2.9	28
42	Stability of magnetic LDH composites used for phosphate recovery. <i>Journal of Colloid and Interface Science</i> , 2020, 580, 660-668.	9.4	28
43	In situ monitoring of lepidocrocite bio-reduction and magnetite formation by reflection Mossbauer spectroscopy. <i>American Mineralogist</i> , 2011, 96, 1410-1413.	1.9	21
44	Mechanisms of formation and transformation of Ni-Fe layered double hydroxides in and containing aqueous solutions. <i>Journal of Physics and Chemistry of Solids</i> , 2005, 66, 911-917.	4.0	20
45	Ferrimagnetic properties in Fe(III) (oxy)hydroxycarbonate green rusts. <i>Solid State Sciences</i> , 2008, 10, 40-49.	3.2	19
46	Starch functionalized magnetite nanoparticles: New insight into the structural and magnetic properties. <i>Journal of Solid State Chemistry</i> , 2019, 277, 587-593.	2.9	17
47	Contribution of long-term hydrothermal experiments for understanding the smectite-to-chlorite conversion in geological environments. <i>Contributions To Mineralogy and Petrology</i> , 2016, 171, 1.	3.1	15
48	Title is missing!. <i>Hyperfine Interactions</i> , 1998, 112, 47-51.	0.5	14
49	Reactivity of Callovo-Oxfordian Claystone and its Clay Fraction With Metallic Iron: Role of Non-Clay Minerals in the Interaction Mechanism. <i>Clays and Clay Minerals</i> , 2015, 63, 290-310.	1.3	13
50	As(V) and As(III) sequestration by starch functionalized magnetite nanoparticles: influence of the synthesis route onto the trapping efficiency. <i>Science and Technology of Advanced Materials</i> , 2020, 21, 524-539.	6.1	13
51	Comparative studies of ferric green rust and ferrihydrite coated sand: Role of synthesis routes. <i>Solid State Sciences</i> , 2008, 10, 1342-1351.	3.2	11
52	Effect of Sb on precipitation of biogenic minerals during the reduction of Sb-bearing ferrihydrites. <i>Geochimica Et Cosmochimica Acta</i> , 2021, 309, 96-111.	3.9	11
53	Remineralization of ferrous carbonate from bio-reduction of natural goethite in the Lorraine iron ore (Minette) by <i>Shewanella putrefaciens</i> . <i>Chemical Geology</i> , 2015, 412, 48-58.	3.3	10
54	Phosphate removal from water by naturally occurring shale, sandstone, and laterite: The role of iron oxides and of soluble species. <i>Comptes Rendus - Geoscience</i> , 2019, 351, 37-47.	1.2	8

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55	Abiotically or microbially mediated transformations of magnetite by sulphide species: The unforeseen role of nitrate-reducing bacteria. <i>Corrosion Science</i> , 2018, 142, 31-44.	6.6	7
56	Structure of single sheet iron oxides produced from surfactant interlayered green rusts. <i>Applied Clay Science</i> , 2019, 170, 86-96.	5.2	7
57	Iron-iron oxide supported palladium catalyst for the interconversion of formate and carbon dioxide. <i>Chemical Engineering Journal</i> , 2022, 427, 131763.	12.7	6
58	Biogenic Fe(II-III) Hydroxycarbonate Green Rust Enhances Nitrate Removal and Decreases Ammonium Selectivity during Heterotrophic Denitrification. <i>Minerals (Basel, Switzerland)</i> , 2020, 10, 818.	2.0	5
59	Use of Ferrihydrite-Coated Pozzolana and Biogenic Green Rust to Purify Waste Water Containing Phosphate and Nitrate. <i>Current Inorganic Chemistry</i> , 2016, 6, 100-118.	0.2	3
60	Insight into the magnetic properties of Pb-doped iron oxide nanoparticles during Fe(III) bio-reduction by <i>Shewanella oneidensis</i> MR-1. <i>Chemical Geology</i> , 2022, , 120904.	3.3	2
61	Pb-Bearing Ferrihydrite Bioreduction and Secondary-Mineral Precipitation during Fe Redox Cycling. <i>Minerals (Basel, Switzerland)</i> , 2022, 12, 610.	2.0	1